

REMARKS/ARGUMENTS

Favorable reconsideration of this application is respectfully requested. Applicant has amended claims 1, 13 and 19 and canceled claims 3-4, 6, 9, 11-12, 14-15, 17-18 and 20. Favorable reconsideration of this application is, consequently, earnestly solicited in view of the following remarks.

REJECTIONS UNDER 35 U.S.C. 112

Claims 13-16 and 18-20 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite. Again, the Examiner states that the term 'discontinuous electrode' is confusing and unclear.

In the amendment filed on December 13, 2007, Applicant amended the specification to amend the paragraph on page 7 between lines 7 and 8 to provide a clear definition of "discontinuous" as claimed and shown in the Figures. The amended paragraph defines the discontinuous electrode as "including two or more adjacent finger-like extensions that are separated by a distance and connected together at one end, as shown, for example, in Figs. 4 and 10. Applicant also amended the paragraph on page 8 between lines 15 and 23 to clarify the electrode configuration shown in Figure 4.

According to MPEP 2173.01, the fundamental principle contained in 35 U.S.C. 112, second paragraph is that applicants are their own lexicographers. They can define in the claims what they regard as their invention essentially in whatever terms they choose so long as any special meaning assigned to a term is clearly set forth in the specification. See MPEP § 2111.01. Applicant may use functional language, alternative expressions, negative limitations, or any style of expression or format of claim which makes clear the boundaries of the subject matter for which protection is sought.

Applicant believes that the amended paragraph clearly establishes a definition of "discontinuous electrode" in such a way as to enable one skilled in the art to which it pertains, or which it is most nearly connected, to make and/or use the invention, and/or be reasonably appraised of the scope of the invention.

For this reason, Applicant believes that claims 13-16 and 18-20 are allowable under section 112. Thus removal of the rejection is requested.

REJECTIONS UNDER 35 U.S.C. 103(a)

Claims 1-3, 5, 7-8, 11-15 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuyama (U.S. Patent 6,469,765) in view of Tai (U.S. Publication 2001/0046027). Applicant respectfully disagrees.

Matsuyama teaches a solution where (1) electrodes are on opposing substrates as shown by common electrodes 400 and 500 that are separated by a LC layer and a pixel layer on one of the top and bottom substrates; (2) perpendicular alignment between common and pixel electrodes; (3) electric field perpendicular to the substrate between the pixel; and 4) common electrodes; and LC molecules driven in a plane parallel to the substrate. Tai teaches a plate shaped pixel electrode and a striped-shaped common electrode both on the same side of the liquid crystal layer. No electrode on the opposing substrate as required by Matsuyama.

The Examiner suggests that it would have been obvious to replace the Matsuyama second plate-shaped common electrode with the Tia striped-shaped common electrode while retaining the Matsuyama first plate shaped common electrode. This suggested combination fails to meet the requirements set forth by Matsuyama in col. 6 between lines 38 and 67. This suggested combination does not produce the electric fields required by Matsuyama. The resulting structure would include Matsuyama top substrate with Matsuyama's plate shaped (continuous) common electrode and a second substrate with Tai's plate-shaped pixel electrode and Tai's striped-shaped common electrode.

In other words Matsuyama is only considered because it includes a top common electrode and a bottom common electrode. Then Matsuyama's second plate shaped common electrode has to be replaced with Tai's discontinuous common electrode. Then Matsuyama's discontinuous pixel electrode has to be replaced with Tai's plate shaped pixel electrode. MPEP 2142 requires that the Examiner put aside the applicant's disclosure in reaching an obviousness determination but recognizes that "hindsight" based upon applicant's disclosure is difficult to avoid. Thus, to establish a prima facie case of obviousness, the key is the clear articulation of the reasons.

The Federal Circuit has stated that "rejections on obviousness cannot be sustained with mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." Applicant believes that Matsuyama teaches against the modifications suggested by the Examiner on col. 6 between lines 49 and 52. Applicant's invention uses a crossed field effect structure. Neither

Matsuyama nor Tai teach use of a crossed field effect structure. Only hindsight would lead to the combination suggested. Applicant respectfully requests that the Examiner identify the reference supporting the combination to produce the crossed field effect claimed in claim 1.


Applicant has amended claims 1, 13 and 16 to clarify the condition of the electric field depending on the voltages applied to the electrodes. Applicant has canceled claims 11-12 and 14-15. Neither Matsuyama nor Tai, nor the combination of Matsuyama and Tail, include all of the limitations of amended claims 1, 13 and 19.

For the reasons provided, Applicant believes that claims 1-3, 5, 7-8, 13 and 18-19 are allowable under 35 U.S.C. 103(a) over Matsuyama in view of Tai. Thus removal of the rejection is requested.

Nakanishi has been added to Matsuyama and Tai to reject claims 10 and 16. Claims 10 and 16 depend from independent claims 1 and 13 respectively. By way of dependency, Applicant believes that claims 10 and 16 are allowable. Thus, removal of the rejection is requested.

In view of the foregoing considerations, it is respectfully urged that claims 1-2, 5, 7-8, 10, 13, 16 and 19 be allowed. Such action is respectfully requested. If the Examiner believes that an interview would be helpful, the Examiner is requested to contact the attorney at the below listed number.

Respectfully Submitted;



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